AMENDMENTS TO THE CLAIMS

Please amend the claims as follows.

Claims 1-85: Cancelled

86.   (Currently Amended) An ~~distributed storage management~~ apparatus comprising:
a storage virtualization engine (SVE) , wherein

said SVE comprises a plurality of multi-port controllers,

at least one of said multi-port controllers comprises a plurality of ports and an interface controller,

said interface controller is associated with one of said ports,

said at least one of said multi-port controllers is configured to

determine a state of said interface controller, wherein said interface controller is configured to receive a signal, and

enable said port if said signal is valid.

87.   (Currently Amended) The apparatus of claim 86, wherein
~~said SVE comprises a plurality of multi-port controllers~~
said at least one of said multi-port controllers is configured to configure said one of said ports of said at least one of said multi-port controllers.

88.   (Previously presented)   The apparatus of claim 87, wherein
each of said multi-port controllers is a dual-port Fibre Channel controller having a first port and a second port.

89.   (Currently Amended) The apparatus of claim 87, wherein
said at least one of said multi-port controllers is configured to communicatively couple said SVE to another SVE.

90.   (Previously presented)   The apparatus of claim 89, wherein

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said at least one of said multi-port controllers is configured to be communicatively
    coupled to a multi-port controller of said another SVE.

91.   (Currently Amended) The apparatus of claim 87, further comprising:
a storage subsystem, wherein
        ~~at least one~~ a multi-port controller of said multi-port controllers is coupled to said
            storage subsystem.

92.   (Currently Amended) The apparatus of claim 87, further comprising:
a host computer, wherein
        ~~at least one~~ a multi-port controller of said multi-port controllers is coupled to said
            host computer.

93.   (Previously presented)   The apparatus of claim 87, further comprising:
a plurality of SVEs, wherein said SVE is one of said SVEs.

94.   (Currently Amended) The apparatus of claim [[86]] 93, wherein
each of said multi-port controllers of each of said SVEs is a dual-port Fibre Channel
            controller having a first port and a second port, and
a second port of at least one multi-port controller of one of said SVEs is coupled to a
            second port of at least one multi-port controller of one other of said SVEs.

95.   (Currently Amended) The apparatus of claim 93, wherein
~~at least one~~ a multi-port controller of said multi-port controllers of said SVE is
            communicatively coupled to a multi-port controller of one of said SVEs.

96.   (Currently Amended) The apparatus of claim 93, further comprising:
a storage subsystem, wherein
        ~~at least one~~ a multi-port controller of said multi-port controllers of said SVE is
            coupled to said storage subsystem.

97.   (Currently Amended) The apparatus of claim 96, further comprising:

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a switch, wherein said switch is configured to couple said storage subsystem to said ~~at least one~~ a multi-port controller of said multi-port controllers of said SVE.

98.   (Currently Amended) The apparatus of claim 93, further comprising:
a host computer, wherein

    ~~at least one~~ a multi-port controller of said multi-port controllers of said SVE is

        coupled to said host computer.

99.   (Currently Amended) The apparatus of claim 98, further comprising:
a switch, wherein said switch is configured to couple said host computer to said ~~at least~~

    ~~one~~ a multi-port controller of said multi-port controllers of said SVE.

100.   (Previously presented)   The apparatus of claim 93, wherein
each of said SVEs is communicatively coupled to at least one other of said SVEs.

101.   (Previously presented)   The apparatus of claim 100, wherein said each of said SVEs is communicatively coupled to said at least one other of said SVEs by virtue of at least one of said multi-port controllers of said each of said SVEs being communicatively coupled to a multi-port controller of said at least one other of said SVEs.

102.   (Previously presented)   The apparatus of claim 100, further comprising:
a secondary network, wherein

    at least one of said SVEs is communicatively coupled to said secondary network.

103.   (Previously presented)   The apparatus of claim 102, wherein
a plurality of said SVEs are communicatively coupled to said secondary network, and said plurality of said SVEs communicate with one another using said secondary network.

104.   (Previously presented)   The apparatus of claim 100, wherein said SVEs are coupled to form a storage area network (SAN).

105.   (Previously presented)   The apparatus of claim 104, wherein said multi-port controllers are coupled to form said SAN.

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106.   (Previously presented)   The apparatus of claim 104, wherein

a port of a first multi-port controller of a first one of said SVEs is coupled to a port of a

second multi-port controller of a second of said SVEs, and

said first and said second ones of said SVEs are communicatively coupled to one another

by said first multi-port controller and said second multi-port controller.

107.   (Previously presented)   The apparatus of claim 104, further comprising:

a host computer; and

a storage subsystem, wherein

said multi-port controllers are coupled to form a storage area network, and

said host computer and said storage subsystem are communicatively coupled to

one another by said storage area network.

108.   (Previously presented)   The apparatus of claim 107, wherein

a host-side switch, wherein said host-side switch is configured to couple said host

computer to said at least one of said SVEs, and

a storage-side switch, wherein said storage-side switch is configured to couple said

storage subsystem to said at least one of said SVEs.

109.   (Previously presented)   The apparatus of claim 104, wherein, for each of

said SVEs,

a host-side multi-port controller of said multi-port controllers of said each of said SVEs is

dedicated to host-side connections, and

a storage-side multi-port controller of said multi-port controllers of said each of said

SVEs is dedicated to storage-side connections.

110.   (Previously presented)   The apparatus of claim 109, wherein each of said

multi-port controllers is a dual port controller.

111.   (Previously presented)   The apparatus of claim 109, wherein

a first storage-side multi-port controller is communicatively coupled to a second storage-

side multi-port controller, wherein

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a first one of said SVEs comprises said first storage-side multi-port controller,

a second one of said SVEs comprises said second storage-side multi-port

controller, and

said first and said second storage-side multi-port controllers are ones of said

storage-side multi-port controllers.

112.   (Previously presented)   The apparatus of claim 111, wherein said first and said second storage-side multi-port controllers are communicatively coupled to one another via an in-band link.

113.   (Previously presented)   The apparatus of claim 109, wherein

a first host-side multi-port controller is communicatively coupled to a second host-side

multi-port controller, wherein

a first one of said SVEs comprises said first host-side multi-port controller,

a second one of said SVEs comprises said second host-side multi-port controller,

and

said first and said second host-side multi-port controllers are ones of said host-

side multi-port controllers.

114.   (Previously presented)   The apparatus of claim 113, wherein said first and said second host-side multi-port controllers are communicatively coupled to one another via an in-band link.

115.   (Previously presented)   The apparatus of claim 104, wherein

said SAN comprises a backbone,

said backbone is formed by a SCSI upper-layer protocol and a fibre channel lower-layer

protocol.

116.   (Previously presented)   The apparatus of claim 115, wherein each of said multi-port controllers is a dual port controller.

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117.   (Previously presented)   The apparatus of claim 115, wherein a first one and a second one of said SVEs are communicatively coupled to one another via an in-band link.

118.   (Previously presented)   The apparatus of claim 117, wherein

said in-band link is one of a plurality of in-band links,

each of said SVEs is communicatively coupled to another of said SVEs by at least one of said links, and

said SVEs and said links are configured to support communication of SAN management information.

119.   (Previously presented)   The apparatus of claim 117, wherein said first and said second ones of said SVEs are further communicatively coupled to a secondary network.

120.   (Previously presented)   The apparatus of claim 119, wherein

said in-band link is one of a plurality of in-band links,

each of said SVEs is communicatively coupled to another of said SVEs by at least one of said links, and

said secondary network is independent of said in-band links.

121.   (Previously presented)   The apparatus of claim 120, wherein

said SVEs are configured to communicate with one another via said secondary network concurrently with communicating with said one another via said in-band links.

122.   (Previously presented)   The apparatus of claim 121, further comprising:

a host computer, communicatively coupled to said secondary network, wherein said SVEs are configured to communicate with said host computer via said secondary network.

123.   (Previously presented)   The apparatus of claim 121, wherein

said SVEs are configured to communicate with one another via said secondary network, in an event of a failure of at least one of said in-band links.

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